

Civla 1965

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KEYNOTE ADDRESS

Dr. Albert D. Wheelon
Deputy Director/Science and Technology
Central Intelligence Agency

It is very nice indeed to see so many friendly faces and so many old friends here--gathered around the same cause.

If you pause and examine the post-war pattern of national security intelligence in the United States, you will see that it has been dominated in very large measure by technical intelligence considerations. Going back to the second World War, we were concerned with the whole question of radar espionage. We launched para-military operations against the French coast to pick up the new developments in German radars as they affected our landing operations. After the war, the pace quickened for the Intelligence Community with the tremendous focus on the nuclear problem, particularly as it applied to possible Soviet development of nuclear weapons. When that problem was settled, essentially pragmatically, we considered how long it would take the Soviets to accumulate a significant stockpile of nuclear weapons and what effect this would have on their posture in world affairs.

The next big questions on the technical front related to missile intelligence: "When were the Russians going to get the ICBM, and when were they going to have a significant number of them?" Many other technical problems faced the Intelligence Community then and just as many, if not more, face us

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today. We have before us, for example, a question which is perhaps more important than all of these others in terms of national expenditure. "Are we running a one-sided race to the moon in Apollo, or do we, in fact, have a parallel or slightly different program in the Soviet Union?" It makes quite a lot of difference because I think we are certainly considering cutting some corners in Apollo, and we need to know explicitly what the competition is doing. Can we afford to pad the Apollo Program with another two years or should we try to whack a year off of it? These are the kinds of questions that the President and NASA's Jim Webb have thrown at the Intelligence Community, particularly the Central Intelligence Agency, over a period of years. The queries are all technical, thereby requiring technical collection and technical analyses to answer them.

This technical data collected by such means as radars, acoustic systems, photography of the kind brought back by the U-2 all have been interpreted by technical individuals, many of whom have come for the first time into active participation in the intelligence program. They have brought with them professional skills acquired in various fields to understand the counterpart programs in the United States. The data which these technical collection systems produce--the large radar systems on the periphery of the Soviet Union, the ELINT systems, the back-scatter radar, and so on--are by and large

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engineering data. Each is either in analog, digital, or film form. There is one important step which has to be made before this data can be turned into intelligence: It has to be translated into English. The problem is not one of translating Russian into English. The problem is to translate engineering data into English. And that's the place where I think most of us come in, with the contribution that we are making to the problem.

I came into the Intelligence Community as a full-time civil servant just about two years ago as a result of a very lengthy conversation with the Director, who I think most of you know is an engineer by training and also by profession. Mr. McCone explained that both he and President Kennedy were anxious, in fact they thought it was absolutely essential, for this country to have a great deal more solid technical and scientific intelligence. My response was fairly straight-forward: I mentioned that in this country of ours we have 190 million fairly sophisticated people possessing all the skills one could desire. The problem is to wire up these people, to bring them into meaningful participation on the problem, to give them the information, to motivate them, and to create a society in which the requisite kind of work can be done. The amount of intelligence that can be produced is essentially limitless, dependent upon how much of the national capability, human resources, money, and energy is diverted into this business. I did point out further that one must have a great

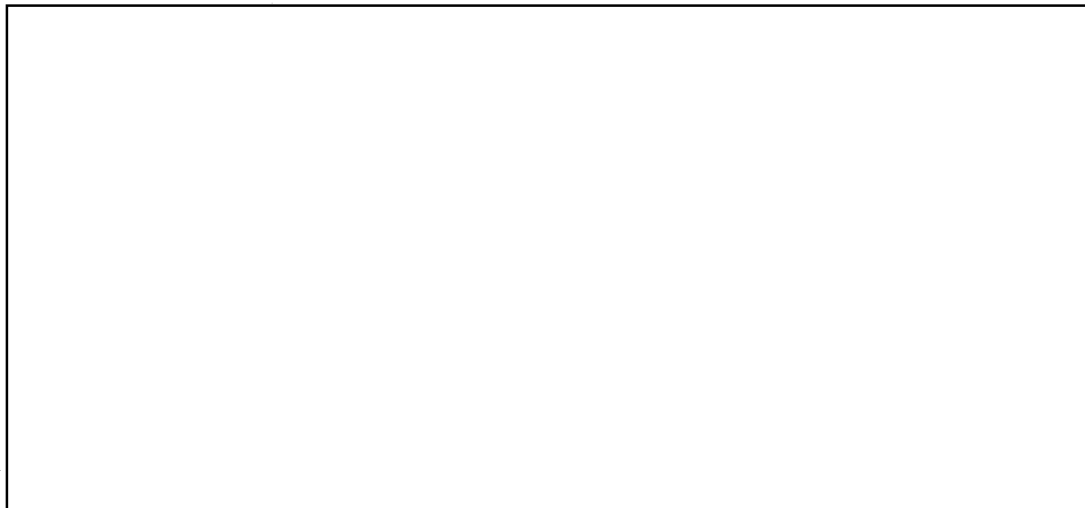
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With regard to the missile and space area, I am afraid that we can't make the same statement. We certainly couldn't two years ago, so I put most of my energies here, with Mr. McCone's concurrence. I think you might be interested to know that the United States now spends [redacted] to

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collect intelligence on foreign missile and space events, mostly Soviet. This

[redacted] is spent in small parcels by many different services and the pro-

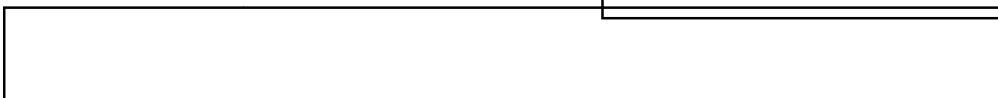
blem is tremendously fragmented.

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There is also the highly evident problem that missiles, when they go off, are a lot less energetic than nuclear weapons.

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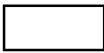
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The Central Intelligence Agency, in order to discharge its statutory responsibilities which include acting as the intelligence adviser to the President, performing services of common concern for the Community, and, at the same time, carrying its own load in the Intelligence Community, made an explicit decision about four years ago to create a national capability for the benefit of the entire Community to upgrade the missile and space system analysis program. The first step taken to implement this decision was to organize an effort, a pilot model if you will,  25X1

This started in mid-1960. The experiment is of some interest because I think many of you are engaged in exactly the same kind of experiment elsewhere now. It was to see how one could go about bringing into participation on the technical intelligence problems, specifically in the missile and space area, the corporate skills of an organization deeply involved in our own programs. At issue were not the specifics that work  but rather the corporate assets which they had: the tracking programs, the joint assets, and their experience and how to

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The third thing was that there was to be no editing, no party line to which the contractor had to adhere. His only real responsibility was to himself, in terms of the technical scholarship that went into it, and to us to work on the right problem. We were not engaged in trying to provide answers that we wanted supported by the contractors.

~~SECRET~~

I think all of you should understand our basic reasoning for bringing corporations, corporate assets, and research laboratories.

25X1 [redacted] into participation on the problem. Once we thought
that we had turned the corner and had really learned how to make

25X1 [redacted] arrangement work, we then set out quickly to replicate

that experience and that capability at a number of other significant places. [redacted] (I think some [redacted])

representatives are with us today) is taking on a major responsibility in the space area for us;

has brought into participation the very extensive experience they had in the whole [] series of air-defense missiles, and they are working on that part of the problem for us;

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[REDACTED]

and a

number of other organizations have been brought into a similar situation. Many of these are just beginning to start up, but I think the end objective is the same, the asymptote is the same for each one of these programs. In each case we have tried to go to a center of technology, sort of a unique national capability, and bring these people into partnership with us. We are not attempting, let me say once again, to duplicate the national capability in CIA; rather, we are trying to come into partnership with the national capability as it exists in certain significant laboratories--to bring it into meaningful participation and not a chattel relationship. At the same time, I should say that this was only one dimension, only one point in the spectrum of participation, because corporations and large national laboratories are not the only answer to the problem. We have also placed heavy stress on panels focused periodically and regularly on particular problems. A good example which comes to mind is the Anti-Ballistic

Missile Group that [REDACTED] brought together

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under [REDACTED]

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[REDACTED]

This group met about quarterly for several days

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each period to examine the Soviet ABM problem; and, in this way, they achieved a recurring focus and accumulated a background to bring to bear on it.

Often in the past, we have tended to use one-shot committees to evaluate significant problems. By bringing this ABM group back together on the problem from time to time, it seems to me that we both have gained considerably from this exercise. I believe that the members of the group enjoyed the experience a great deal more and feel a greater sense of contribution. Sort of on the other end of the spectrum are individuals. Since he probably isn't here today, I'll pick on [] a great friend of mine in the space-physics business, who spends about several weeks a year away from the University working with some of our people. He has contributed to a paper you will hear today on analyzing space-physics problems []

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[] This is a very private, personalized kind of one-for-one relationship, but it does remind one that there are other contributing modes and other very relevant contributions to be made.

Most of this effort that I have been describing for you is in what I call the "estimative area." Here I have to make you a party to the vocabulary that we use. Preparing an estimate is essentially making a judgment. It is the end result of analyses of doing technical translations from engineering data into English.

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But then there is another step, and that is trying to appreciate what this English really means. It is one thing to decide whether a particular satellite is maneuvered or whether two satellites have docked. It is something else to then take the next step and form a judgment on the questions: "What does this mean in terms of a Soviet-manned lunar landing program? Where is this really taking us?"

25X1 It's one thing to try to get very precise trajectories for

Soviet ICBM's. [REDACTED]

25X1 [REDACTED]

25X1 There are about [REDACTED] in the Office of Scientific

Intelligence working for Don Chamberlain, of whom [REDACTED]

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work on the missile and space problem. They are divided into

two divisions--headed by [REDACTED]--and

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that's where the focus for the estimative job is in the Office of Scientific Intelligence.

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It was only after we had gone down this road quite a little way that we realized that there was a need for valid event analyses. The best estimative capability in the world still could not overcome this huge gap: [REDACTED]

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[REDACTED] No one was turning out authoritative event analyses on each shot that occurred, telling us just how far the data could be run and thereby laying the foundation for the estimative process. This was highlighted for me soon after I got here by the way in which the Pacific firings of the Soviet ICBM's were going. [REDACTED]

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The problem, though, was that initially these collection and analyses activities seem to work rather well, but as they kept

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going back to the Pacific and we kept re-running these operations, our "pound of butter" seemed to melt in the National Intelligence Community. It was evident that the data were being squirreled away and fragmented, sent off to separate places like the Guided Missile and Astronautics Intelligence Committee of the United States Intelligence Board, which absolutely was in no position to tell what [REDACTED] meant.

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It was clear that, in perhaps an over-simplified way, people were playing a no-trump game with this data. Which is just a heck of a note, considering the amount of money we put into the gathering and the priority that we placed on the analyses which should be performed from it.

Well, the Director and I were concerned about this situation for a good long time, but things kept going from bad to worse. We finally decided that we had better take unilateral steps to bring this thing back together. About 1 November ¹⁹⁶⁴ we created what is called the Foreign Missile and Space Analysis Center,

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FMSAC. [REDACTED]

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As you may know, Carl Duckett, who was formerly at Huntsville, is now the Director of FMSAC and Dave Brandwein, who used to be

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 is now his Deputy in FMSAC.

I want to differentiate quite clearly in your minds between FMSAC and OSI because you are going to be hearing from these people and also many of you will be making contributions to both offices.

FMSAC is a parallel organization to the Office of Scientific Intelligence. It's one of the 6 major components of my Directorate. FMSAC is not in the business of preparing estimates. They are not making long-range judgments. They aren't trying to say whether the Soviets are going to the moon or whether the Soviets have good or bad ICBM's. They are in the business of taking each event as it occurs and all the data that can be acquired

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and trying to force-fit that together. FMSAC beats this data one against another, not to average the data, but to really find out why there are differences, and which one is right. The organization is to be dominated largely by technical considerations and not administrative or negotiating considerations. We are doing this essentially for the Community, and the product of FMSAC will be available to all members of the United States Intelligence Board on the same basis that it is available to us. Their job is to try to present the clearest picture possible of each event, particularly the spectaculars. I can give you several examples where FMSAC, if it had been in existence at the time, could have ~~xxxxxx~~ contributed greatly to clarifying certain situations which puzzled the Community.

About a year and a half ago, we spent nearly three months determining with high confidence whether or not Vostoks III and IV had docked. As you may recall, there was just an enormous amount of national pressure and interest here to find out whether or not we had been on-upped in the space race. Another example more recently is the Polyet series of satellites the Russians put up that they announced were maneuverable. There was a valid,

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heated debate for about two months in our Community as to whether the satellites had actually maneuvered. Here one was trying to check NORAD tracking data against other sources. The picture just was not clear for a long time; and again, I think you can say the major problem was fragmentation. Well, FMSAC is supposed to cure all of that with one wave of the hand. They are supposed to have carbon copies of all this data and then do the tough job. They will emphasize analysis, and as necessary, will get back into data reduction. If something is wrong with a given kind of data, as data reduction, they are supposed to coax the collector to do it a little better.

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As you may note, the

problem is one of trying to up-grade and up-lift the whole collection and event analysis base that underlies the very important job that Don Chamberlain has, and the rest of the Community has, to produce valid estimates. In short, we want to create a factual basis for preparing estimates. That's the assignment that FMSAC has--and which Carl Duckett and Dave Brandwein will see that FMSAC carries out. I don't think it's important for you to try to sort the two out; we'll do that back here. But, I think it is important to realize that there are two separate centers of pressure on you and both of them are equally valid. Both have their proper place in the sequence of the creation of scientific and technical intelligence. I must say with some pride that I think we have gone

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a long way in the last two years toward creating a national capability in the general missile and space area; but by no means are we satisfied at this point.

I might say that the purpose in holding this classified symposium is perhaps now a little clearer. We have gone to some considerable trouble to create this capability of utilizing all available professional and technical resources on national intelligence problems. We recognized from the beginning that it properly should be spread out and we should go to where the capabilities are to bring them into participation. But still, that leaves geographical fragmentation. Even though we have the best of intentions and motives with respect to encouraging technical exchange, ~~as~~ it seems to me that we had to take the initiative here and create a technical environment in which people could sharpen their swords--perhaps even break them against one another--and hear about the other things that people are doing in this field.

We are not here to argue positions or estimative procedures. We are here to talk about techniques of analysis and the results that we derive therefrom. We have arranged the schedule so that there will be plenty of time between the sessions and probably, like all technical meetings that I have been associated with, most of the good will derive between the actual prepared talks and in the open discussions which follow them.

I hope that you people do not feel that you are speaking for the record here and are committing yourselves to a position. But rather, we hope that for

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the next three or four days there will be the most lively possible technical exchange, a competition of wits and techniques (we can use that phrase); and, more importantly, that we create in a subsidiary way an environment in which you can talk among yourselves: The OSI and FMEAC people with the non-government people who are participating in the problem. Such an environment, once established, will, during the coming year, accelerate the process that we have gone to all this trouble to create. I hope that if this turns out to be a successful enterprise, we will find it valuable enough to re-gather here again next year. To be quite honest, our biggest concern with holding this kind of a session was that of "security." However, I think that our intelligence is only as good as our ability to understand it, to exploit it, and then to communicate it effectively to the people who have to make national decisions. The first step, therefore, is to create a lively society, a technical society in which scientific and technical issues can be debated. I hope that we can proceed in that spirit.

It is very nice to have all of you here and I look forward to having you join us from time to time during the days to come.

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